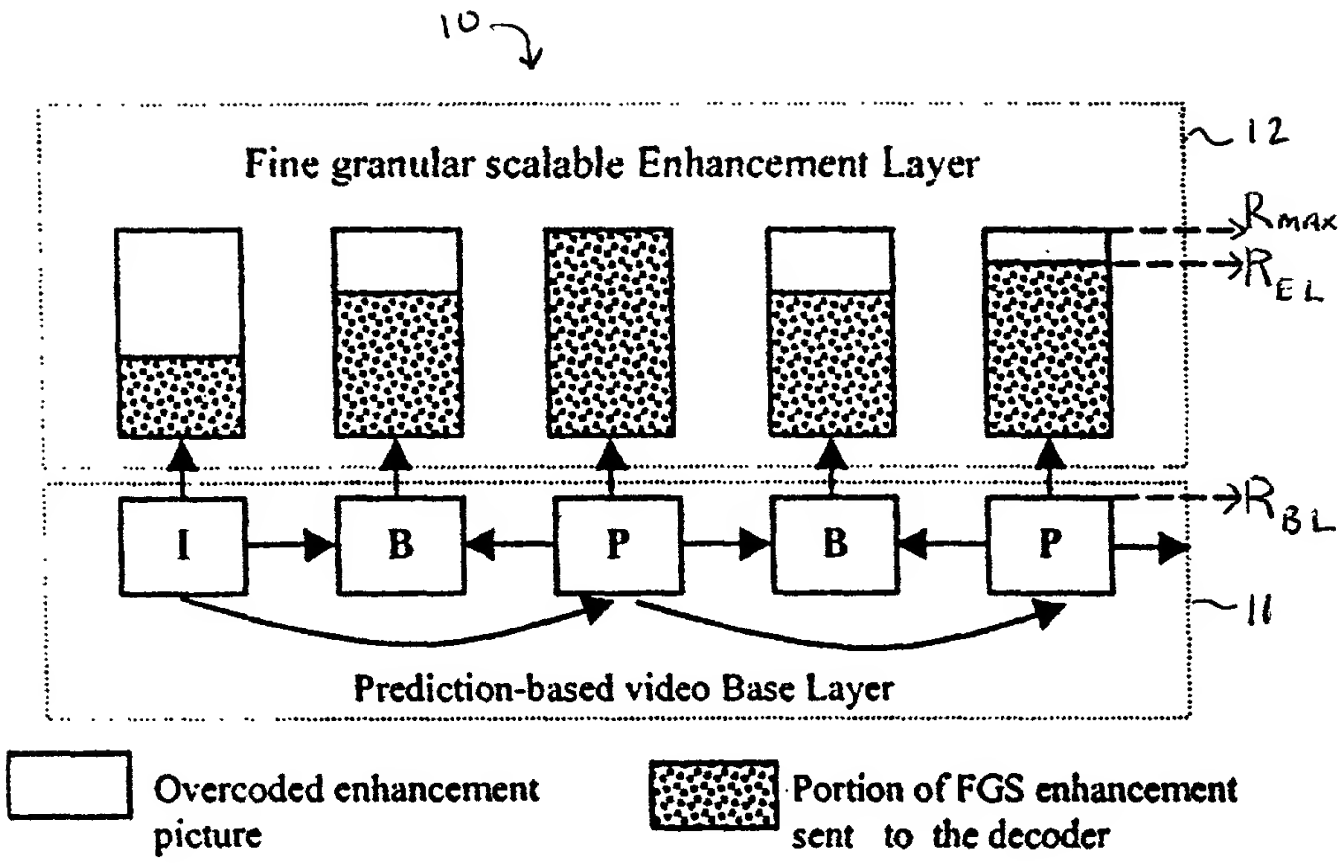

Fig. 1 (Prior Art)

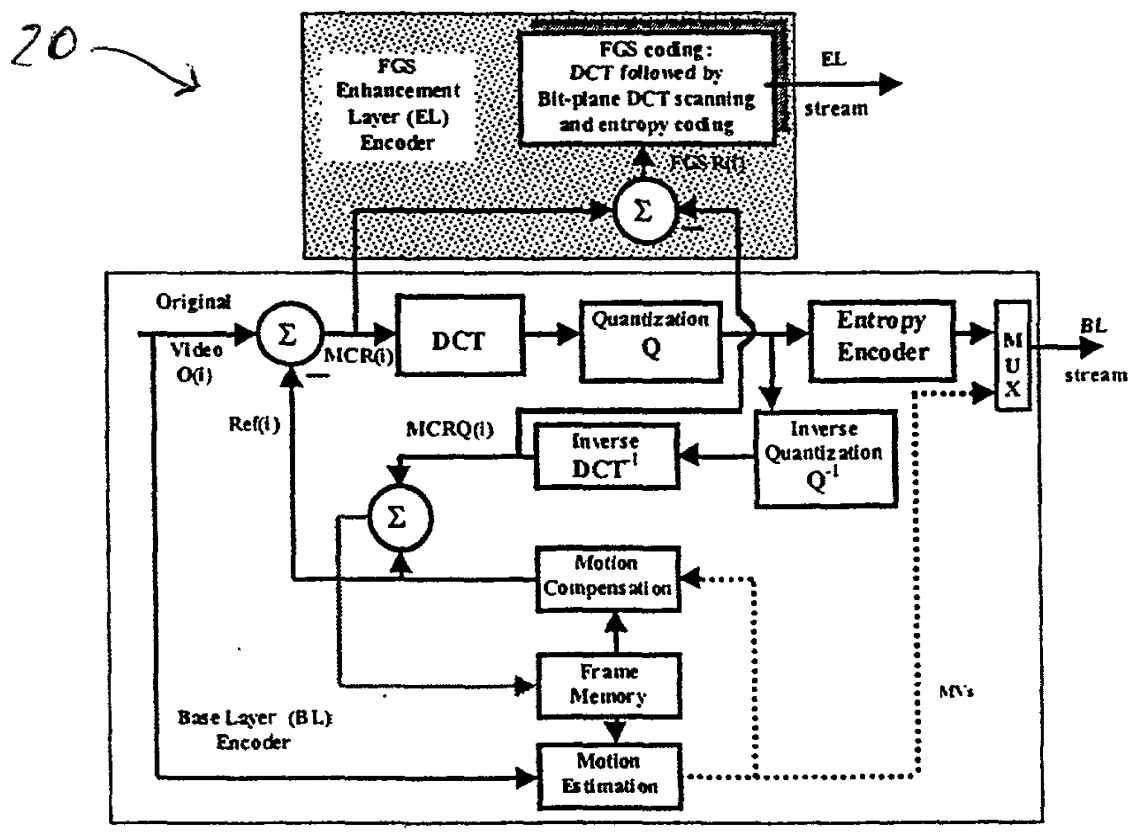

Fig. 2 (Prior Art)

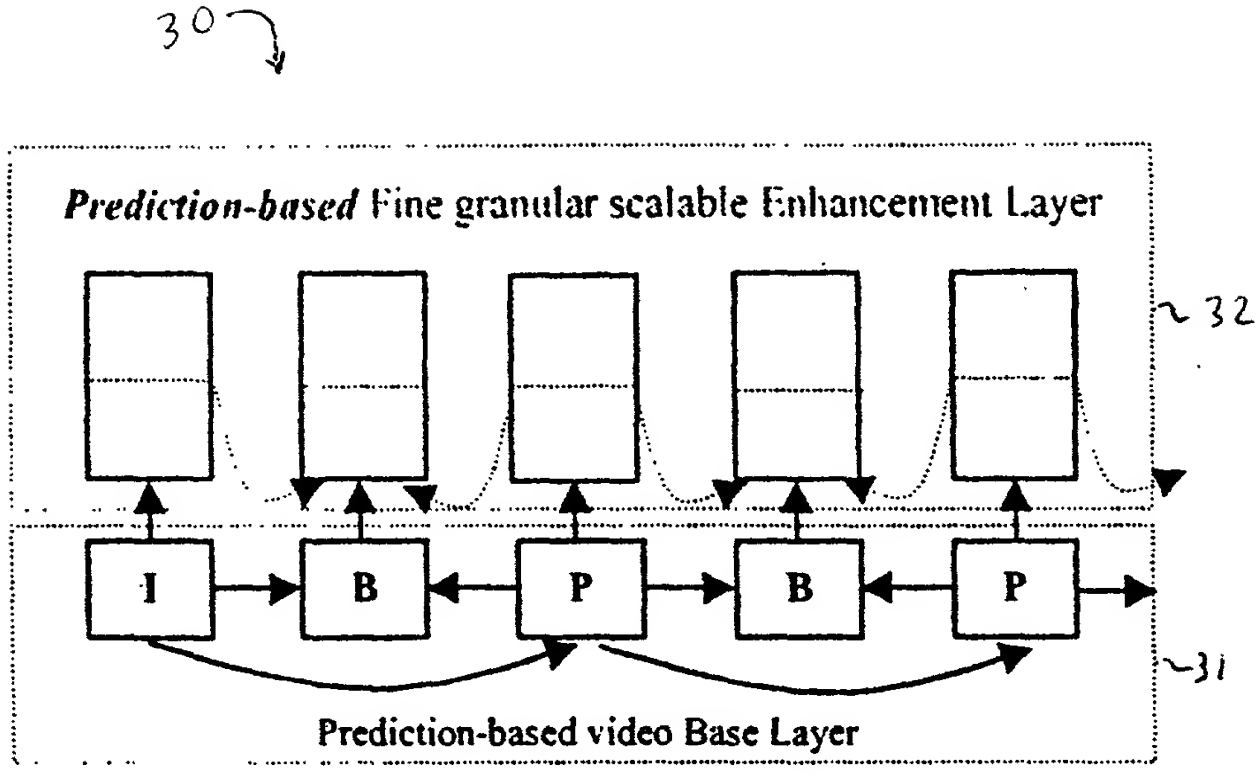
30
Prediction-based Fine granular scalable Enhancement Layer
32
I
B
P
B
P
31
Prediction-based video Base Layer

Fig. 3A

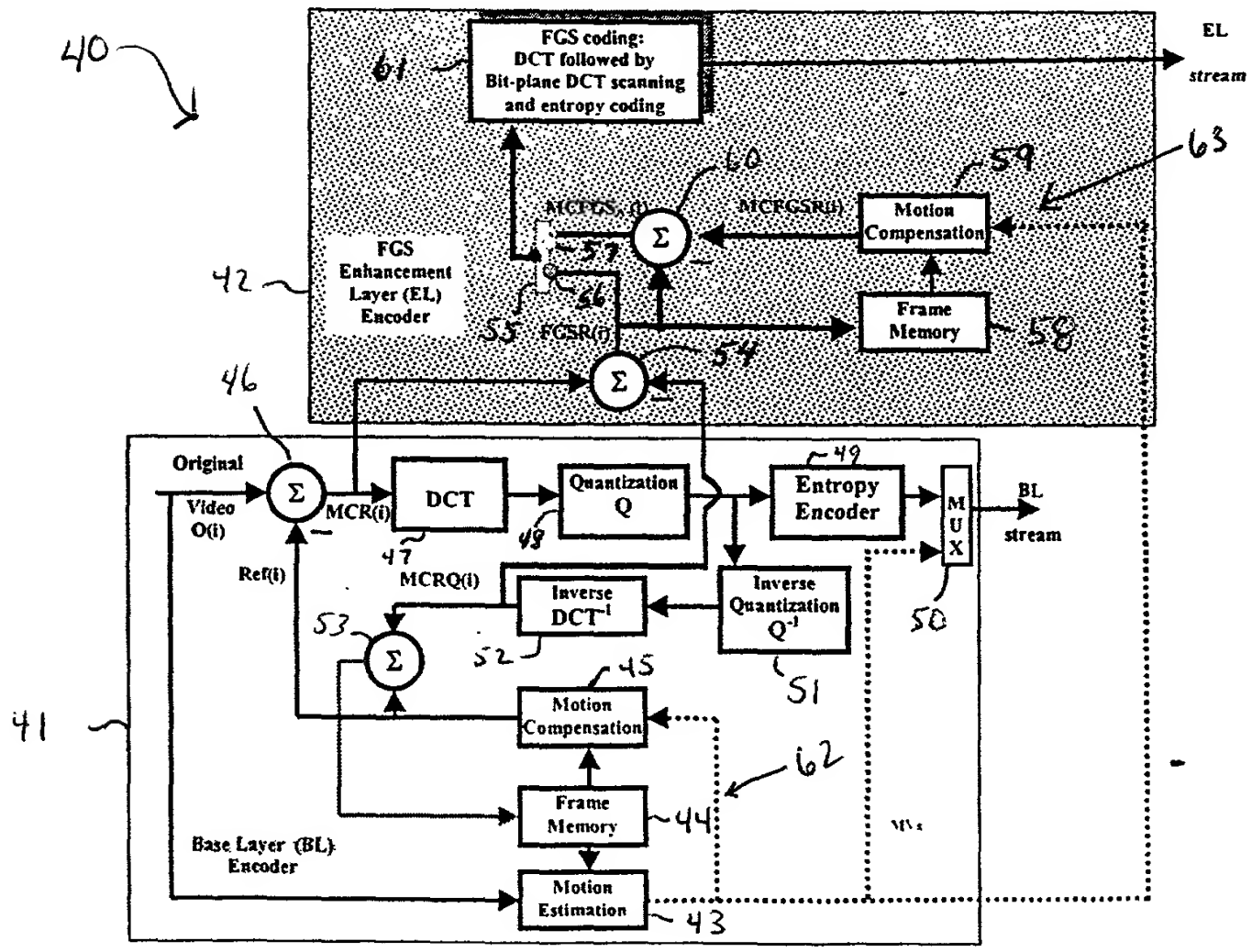
40
61
FGS coding:
DCT followed by
Bit-plane DCT scanning
and entropy coding
EL
stream
63
59
60
MCFGS, (i)
MCFGSR(i)
Motion
Compensation
57
56
55
FGSR(i)
54
Frame
Memory
58
42
FGS
Enhancement
Layer (EL)
Encoder
46
Original
Video
O(i)
MCR(i)
DCT
Quantization
Q
49
Entropy
Encoder
M
U
X
BL
stream
Ref(i)
47
MCRQ(i)
48
Inverse
DCT-1
Inverse
Quantization
Q-1
53
52
50
51
45
Motion
Compensation
62
41
Frame
Memory
44
Base Layer (BL)
Encoder
Motion
Estimation
43

Fig 4

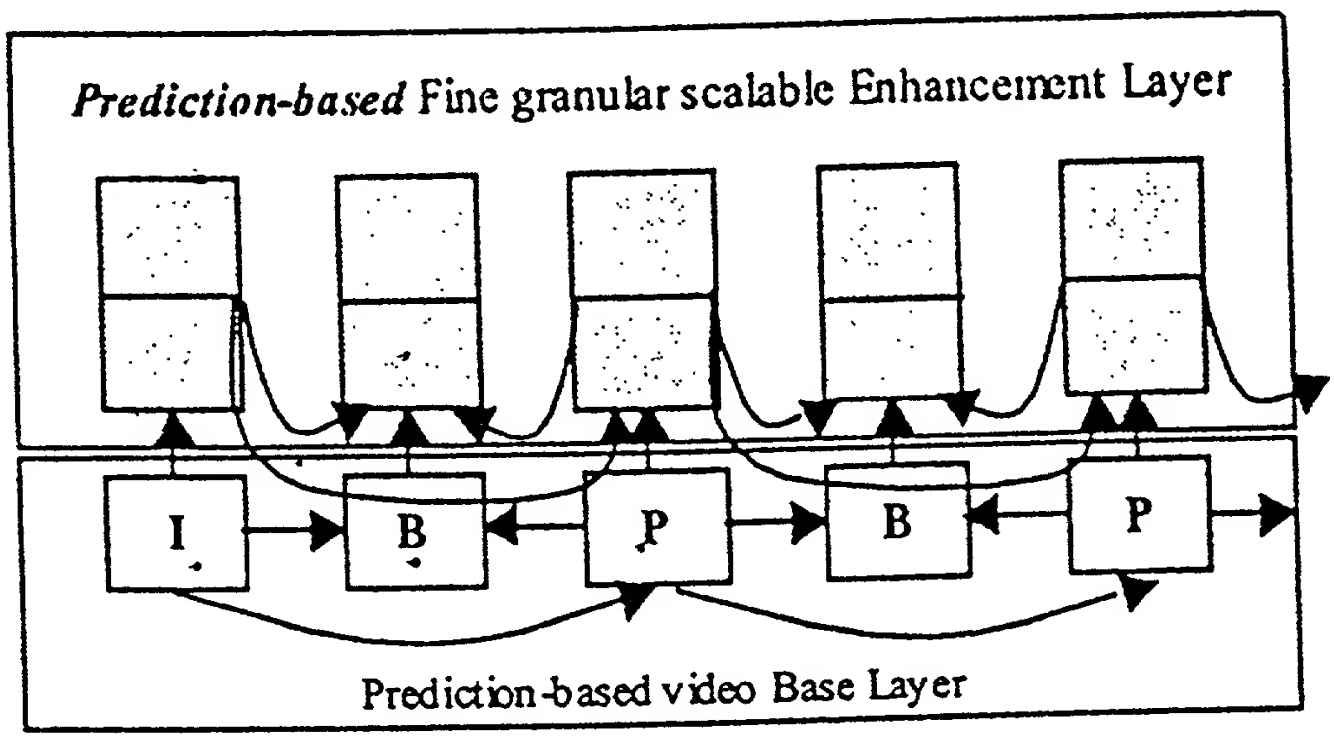
Prediction-based Fine granular scalable Enhancement Layer
I
B
P
B
P
Prediction-based video Base Layer

Fig. 3B

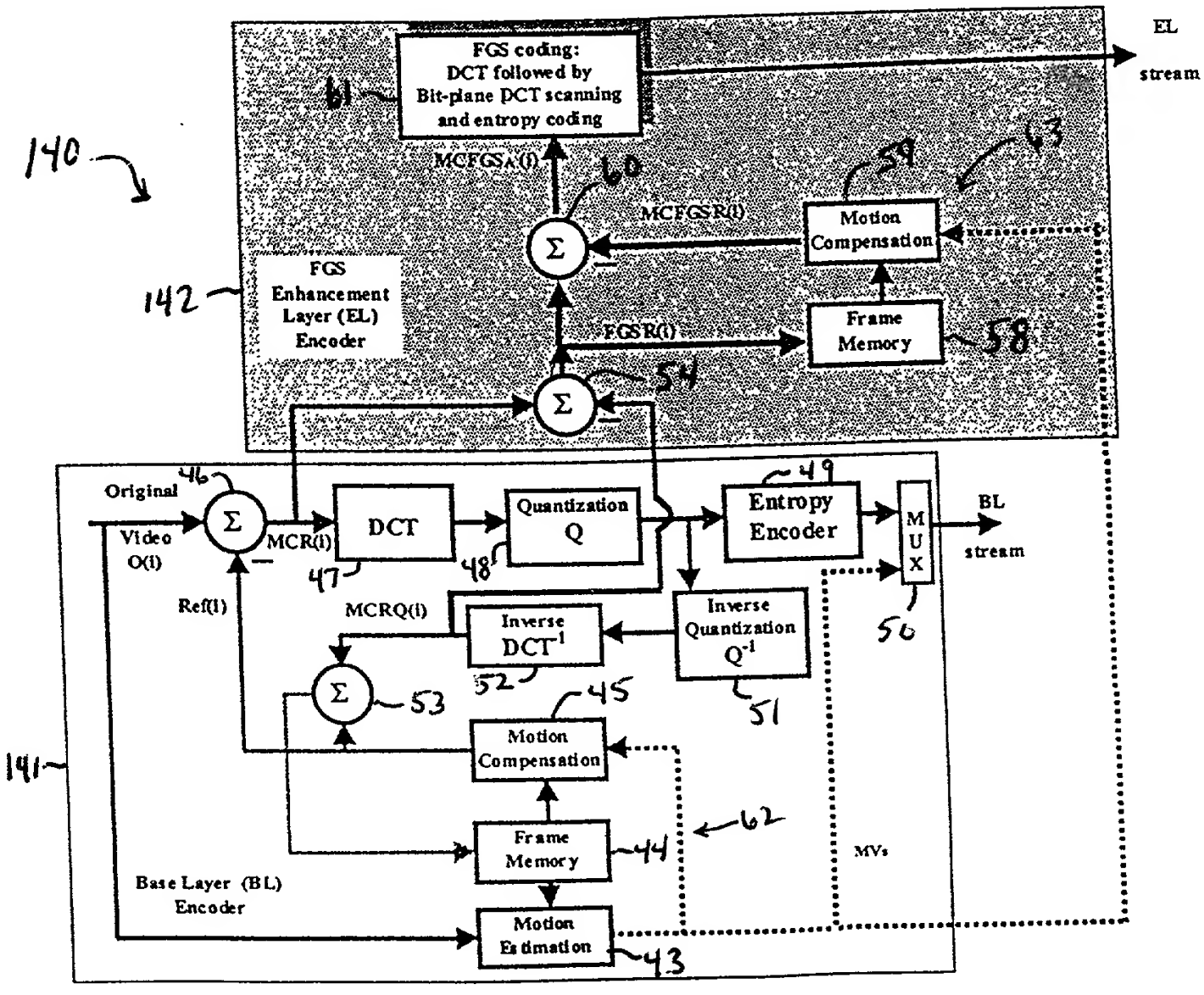
140
142
141
FGS coding:
DCT followed by
Bit-plane DCT scanning
and entropy coding
61
EL
stream
MCFGS$_R$(i)
60
MCFGSR(i)
Motion
Compensation
59
43
FGS
Enhancement
Layer (EL)
Encoder
FGSR(i)
Frame
Memory
58
54
Original
Video
O(i)
46
MCR(i)
DCT
47
Quantization
Q
48
Entropy
Encoder
49
M
U
X
BL
stream
56
Ref(i)
MCRQ(i)
Inverse
DCT^{-1}
52
Inverse
Quantization
Q^{-1}
51
53
45
Motion
Compensation
62
Frame
Memory
44
MVs
Base Layer (BL)
Encoder
Motion
Estimation
43

Fig. 5

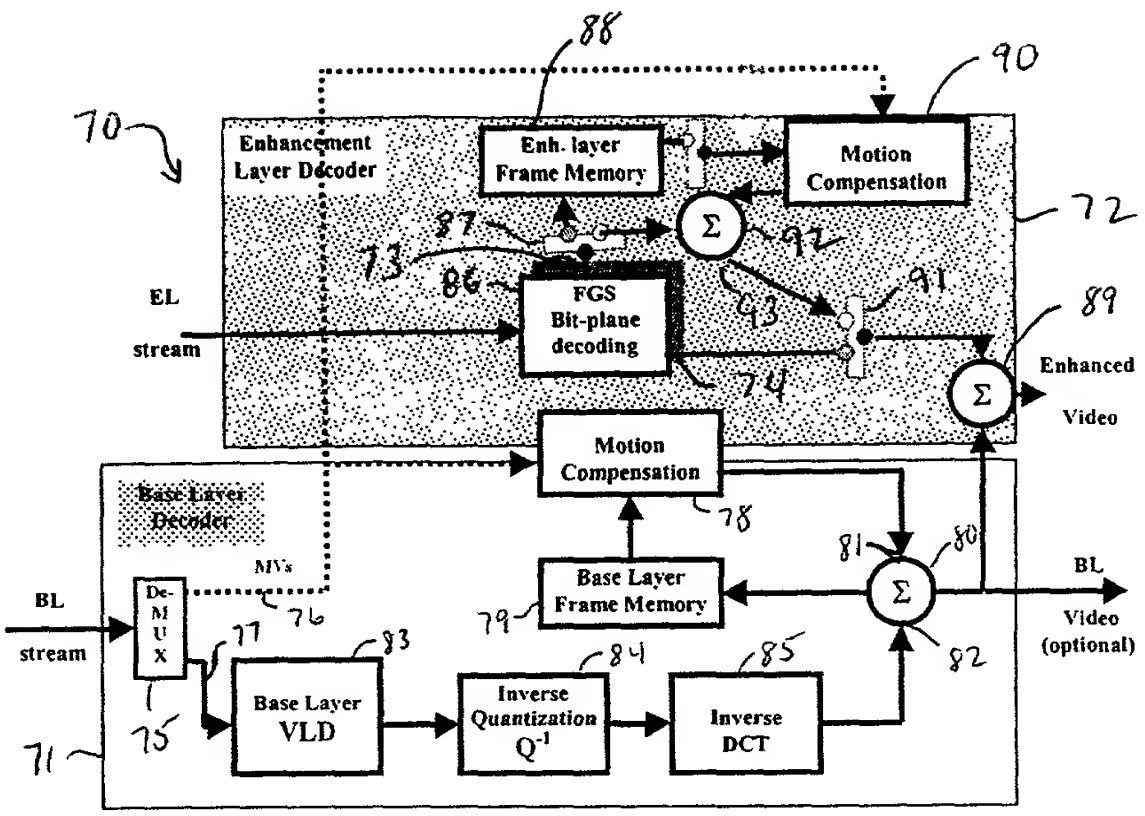
70
Enhancement Layer Decoder
Enh. layer Frame Memory
Motion Compensation
72
88
90
87
73
86
EL stream
FGS Bit-plane decoding
74
91
92
93
89
Enhanced Video
Motion Compensation
78
Base Layer Decoder
MVs
76
BL stream
De-MUX
77
75
71
Base Layer VLD
83
Inverse Quantization Q^{-1}
84
Inverse DCT
85
Base Layer Frame Memory
79
81
80
82
BL Video (optional)

Fig. 6

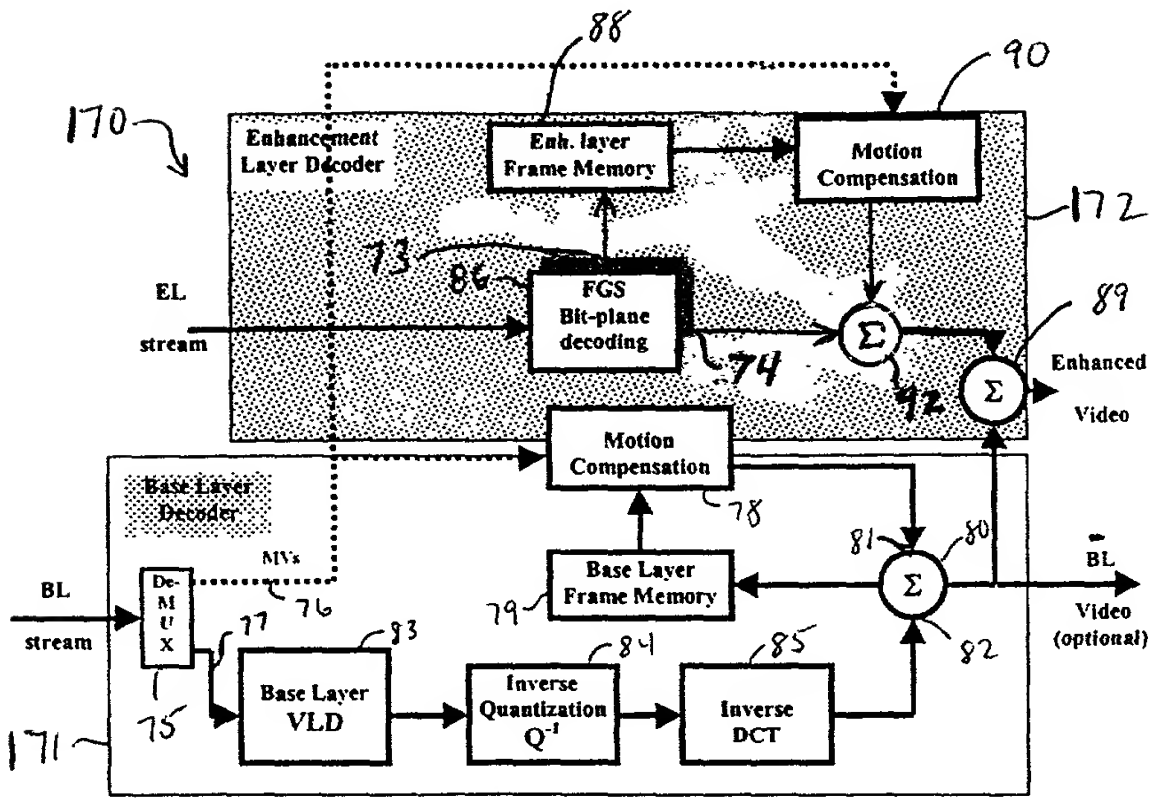
170
Enhancement Layer Decoder
Enh. layer Frame Memory
Motion Compensation
172
88
90
73
86
EL stream
FGS Bit-plane decoding
74
92
89
Enhanced Video
Motion Compensation
78
Base Layer Decoder
MVs
76
BL stream
De-MUX
77
75
171
Base Layer VLD
83
Inverse Quantization Q^{-1}
84
Inverse DCT
85
Base Layer Frame Memory
79
81
80
82
BL Video (optional)

Fig. 7

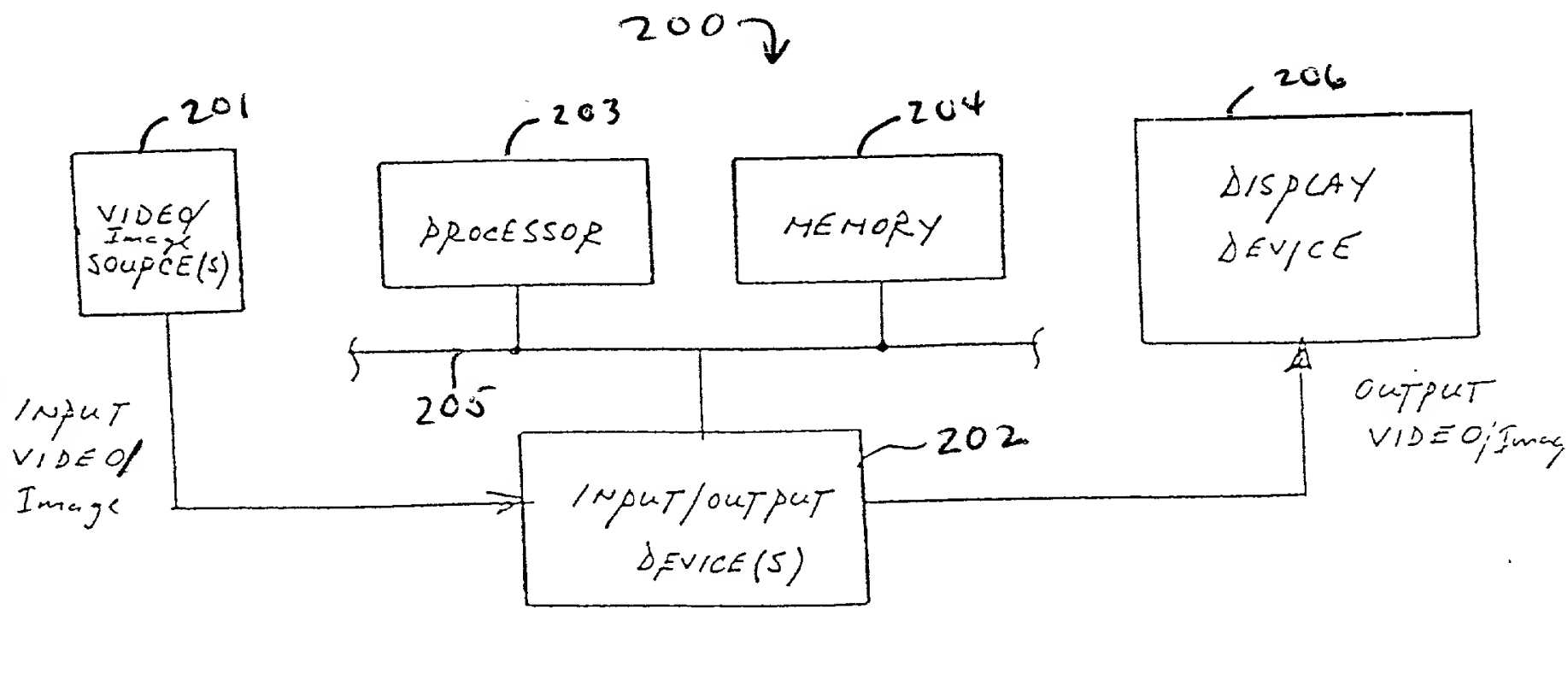
200
201
VIDEO/ Image SOURCE(S)
203
PROCESSOR
204
MEMORY
206
DISPLAY DEVICE
205
INPUT VIDEO/ Image
202
INPUT/OUTPUT DEVICE(S)
OUTPUT VIDEO/Image

Fig. 8